

20—010 Draining and filling-in of coolant — anti-freeze table

Total filling capacities cooling system with heating and mixing ratio Anti-freeze/water in liters

| Model | Engine | Total filling capacity cooling system with heating | Mixing ratio anti-freeze ¹⁾ /water ²⁾ for an anti-freeze protection up to | |
|-------|---------|--|--|-----------|
| | | | –30 °C | –40 °C |
| 115 | 115.923 | 11 | 5.00/6.00 | 5.75/5.25 |
| | 115.926 | | | |
| | 115.951 | | | |
| 123 | 115.938 | 10 | 4.50/5.50 | 5.25/4.75 |
| | 115.939 | | | |
| | 115.954 | | | |

1) Refer to specifications for service products page 325.

2) Refer to specifications for service products page 310 and 311. For model 115, always add 1 % = 10 cc/l anti-corrosion oil even when using anti-freeze.

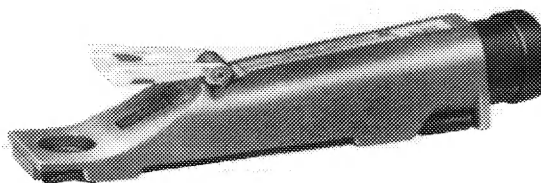
Tightening torques

| | | Nm |
|-------------------------------|-----------|---------------------|
| Drain plug radiator | model 115 | 8 |
| | model 123 | 1.5–2 ¹⁾ |
| Drain plug cylinder crankcase | | 30 |

1) This torque can be attained by using a disc or a coin.

Conventional tool

Anti-freeze tester
Prestone-VU-Check (Union Cabride)
e.g. made by Philipp Gather, D–4020 Mettmann 2



R–4789

Note

In order to avoid corrosion, let not drop concentration of anti-freeze below -20°C anti-freeze protection (30 % by volume).

If no anti-freeze is available and only water is filled in, make sure to add 1 % of a treating agent (anti-corrosion oil, 10 cc/l water), on model 115 this should be done, even when already using ant-freeze.

Attention!

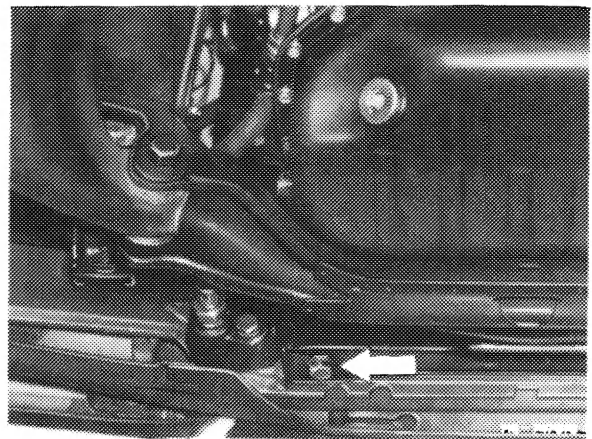
In order to avoid damage to light metal components, only use approved anti-freeze agents (specifications for service products page 325) and treating agents (specifications for service products page 311).

Draining

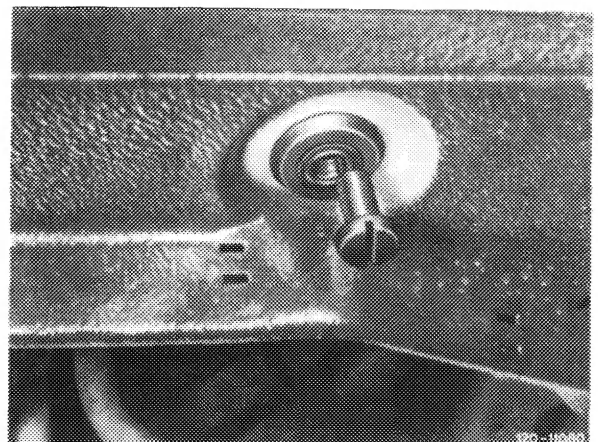
1 Stepwise open closing cover on radiator (only below 90°C).

2 Unscrew drain plug on radiator.

Drain plug (arrow) model 115



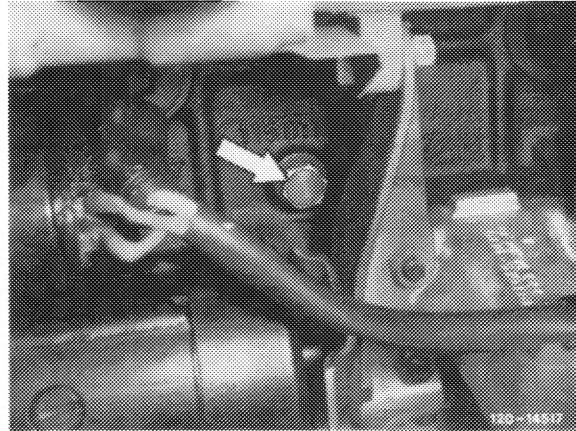
Drain plug model 123



3 On vehicles with and without air conditioning, set heater regulation to maximum heating output.

On vehicles with automatic climate control (model 123), press push-button "DEF".

4 Unscrew drain plug (arrow) on cylinder crankcase at the right, rear of engine carrier.

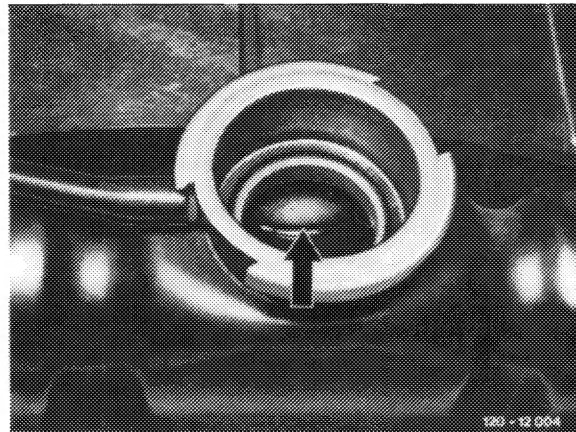


Filling-in

5 Check on vehicles with or without air conditioning whether heating regulation has been set to maximum heating output and/or whether on vehicles with automatic climate control (model 123) the push-button "DEF" has been depressed.

6 **Slowly** fill-in coolant up to mark for cold coolant (model 115 arrow, model 123 "a"). Leave filler plug on radiator open.

Model 115

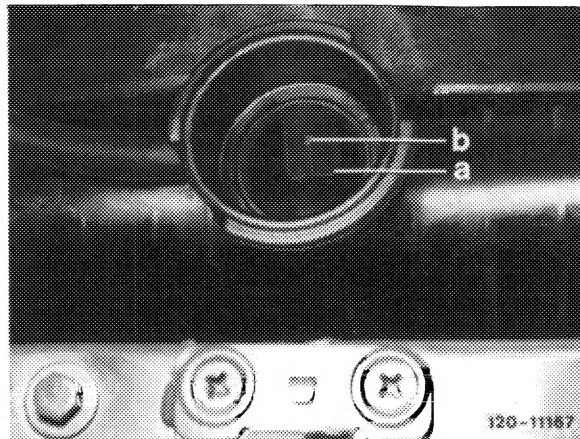


7 Warm-up engine by intermittently depressing the accelerator pedal until coolant thermostat opens. As from a coolant temperature of approx. 60 °C, put on radiator closing cap.

8 Check coolant level and top up to specified value.

Model 123

- a Level coolant cold
- b Level coolant warm



Attention!

Open radiator closing cap only as from a coolant temperature below 90 °C.